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In the United States Patent and Trademark Office

Serial Number: 10/510207
Application Filed: December 8, 2004
Applicant: Kia Silverbrook
Application Title: Ink Jet Printhead Chip With Predetermined Micro-Electromechanical Systems Height
Examiner/GAU: An H Do

2853

Dated: January 15, 2007
At: Balmain, NSW
Docket No. MJ92NPUS

REPLY

Commissioner for Patents
Washington, District of Columbia 20231

Dear Sir:

In response to the Final Office Action of December 4, 2006, please amend the above-identified application as follows:

Applicant thanks Examiner for the detailed Office Action dated December 4, 2006. In response to the issues raised, the Applicant offers the following submissions.

35 USC §103 Claims 11-13 and 16

Claims 11-13 and 16 stand rejected as obvious in light of US 5,697,144 to Mitani et al in view of EP 0 416 540 to Usui et al.

The Applicant respectfully submits that this rejection has been raised in error. Independent claim 11 is restricted to inkjet printhead chips that have thermal bend actuators. Neither of the cited references disclose or suggest a printhead with a thermal bend actuator. The Usui reference uses a piezoelectric actuator and the Mitani citation uses bubble generating heater elements. Both of these actuators are fundamentally different from thermal bend actuators which employ differential thermal expansion to bend. A piezo actuator uses the crystal deformation caused by an applied voltage to eject ink and the heater element creates a pressure pulse by rapidly vaporizing ink. Skilled addressees would readily appreciate that piezo actuators and thermal actuators do not fall within the scope of the term 'thermal bend actuator'.